INDEX

Altona, R. E., *see* Hall, T. D.
Armstrong, R. H., *see* Thomas, Brynmor.
Arthur, D. R., *see* Edwards, E. E.

Bald, J. G., testing and maintenance of potato clones, 95–104.
Barnett, A. J. G., preliminary experiments with a small-scale silo tower, 129–36.
Beef production in southern Africa, 81–94; Basutoland, 87–8; Bechuanaland, 88–90; Portuguese East Africa, 86–7; promising pasture grasses, 90–2; South-West Africa, 84–5; Southern Rhodesia, 85–6; Swaziland, 87; Union of South Africa, 82–4.

Cacao in Malaya, 279–80; methods of establishing, 279–80; mixed planting, 280; vegetative propagation, 280.
Cereal crops, effect of plant-growth regulators on, 19–30, 169–76.
Cereal crops, inflammability of, in relation to water-content, 150–62; field tests, 150–1; laboratory tests, 151–4; water-content: relation to climatic factors, 157–62, variation during ripening, 154–7.
Child, Reginald, recent research on the coconut palm with special reference to Ceylon, 177–89.
Chittenden, R. J., the Prang Besar (Malaya) experiments in the selection and propagation of Hevea, 105–11.
Clowes, G. J., *see* Hallsworth, E. G.
Coconut palm, recent research on, with special reference to Ceylon, 177–89; coconut products, 186–7; effect of cover crop, 185; genetics, seed selection, and germination, 180–2; manuring, 182–5; pests and diseases, 177–80: bud-rot, 179; insect pests, 177–8; nut-fall, 179–80; 'tapering', 179.
Cows, dairy, constitution and milk production of, 57–9; correlation between average milk production and age, 58–9.
Cows, dairy, in New Zealand, grazing habits of, 249–63; factors studied: environment-inheritance interactions, 259–60; 'herd laws', 260–2; individuality, 257–9; quantity and quality of pasture, 255–7; rhythms: diurnal, metabolic, seasonal, 254–5; technique and materials, 251–3; weather, 255.
Cows, dairy, longevity of, 49–56; average productive life, 49–50; economic value of longevity, 50–3; effect of culling, 53–4.

Das, P. K., the appetite of lambs grazing cobalt-deficient pasture, 112–18.
Davies, R. O., pasture productivity in Mid-Wales. Pt. I. Experimental methods of measurement, 203–17. Pt. II. Botanical changes in experimental plots, palatability and 'efficiency' of the swards, 264–70.

Edwards, E. E., the control of the tick (*Ixodes ricinus* L.) on grassland, 119–28.
El-Sokkary, A. M., *see* Sirry, I.

Grass, protein quality of, 31–40; determination of, 31 sqq.; composition of grass samples and diets fed to guinea-pigs, 33–4; protein quality of first and second cuts from permanent and temporary grass, 34–5, of cocksfoot and Italian ryegrass, 35–6.
Grassland, control of the tick *Ixodes ricinus* L. on (*see* under Tick).
Grassland production from veld in South Africa, 8–18; composition of veld herbage, 8–9; fertilizer treatments, 10–11; grazing methods, 9–10; live-weight gains and financial returns, 11–15, 16–17; rates of stocking, 11.

Hall, T. D., production from grassland in South Africa: fertilizer treatments and livestock gains on veld, 8–18.
Halliday, D. J., *see* Templeman, W. G.
Hallsworth, E. G., the composition of some coastal pastures in New South Wales and its relationship to milk production. Pt. I. Composition of pastures, 60–72. Pt. II. Relationship of pasture composition to milk production, 73–80.
Hancock, John, grazing habits of dairy cows in New Zealand, 249–63.
Haskell, Gordon, studies with sweet corn. II, Sowing dates and plant characters, 1–7.
Hassan, H. A., *see* Sirry, I.
Hevea, the Prang Besar (Malaya) experiments in the selection and propagation of, 105–11; budding and budded rubbers, 105, 110, 111; clones, 105, 108, 109, 112; isolation, 106–7; isolation gardens, 106; planting out, 109–10; seed gardens: constitution of, 109, lay-out, 107, yields from, 107, 109; seedlings and test tapping: nursery tests, 110, *v.* buddings, 109; vegetative propagation, 106.
Horn, A., correlation between constitution and milk production of dairy cows, 57–9.
Hunter, A. W. S., breeding for disease-resistance in Canada. Pt. III. Horticultural crops and tobacco, 218–26.

Lambs, appetite of, grazing cobalt-deficient pasture, 112–18.
Lewis, A. H., *see* Procter, J.
Leys cut for hay, the productivity of, 281–8; experimental details, 281–3; herbage: protein-content, 285–6, total growth of, 283–5, utilization of, 286–7.
Lloyd, J. R., *see* Davies, R. O.

Maher, Colin, soil conservation in Kenya Colony. Pt. I, 137–49, Pt. II, 233–48.
Meredith, D., *see* Hall, T. D.
Milk, production of dairy cows, 49–56, 57–9; of Egyptian sheep, 163–8.
Miller, T. B., *see* Barnett, A. J. G.
Milton, W. E. J., *see* Davies, R. O.
Mineral deficiencies in arable crops in Hereford and Somerset, 41–8; climate and soils,

42–3; methods, 41–2; results and conclusions, 43–7.
Murray, D. B., photo-periodism in rice in Trinidad with reference to a second crop, 271–5.

Oil-palms in Malaya, research on, 276–9; agronomic, 276–9; manurial experiments, 276–7; replanting, 277; selection and breeding work, 278–9; stem-rot, 277.
Oldaker, C. E. W., *see* Bald, J. G.

Pasture, cobalt-deficient, appetite of lambs on, 112–18; faecal excretion, 113–14, 115–16; grazing experiment in 1946, 113–14, in 1947, 114–16; lamb live-weights, 114, 116.
Pasture grasses in southern Africa, 90–2.
Pasture productivity in mid-Wales. Pt. I. Experimental methods of measurement, 203–17: Lay-out of experiment, 204–6; methods of measuring productivity, 206–7; results in first grazing season, 207–9, in three grazing seasons combined, 209–15. Pt. II. Botanical changes, 264–5, 266. Palatability and efficiency of reseeded grass and permanent pasture, 265–9.
Pastures, coastal, in N.S. Wales. Pt. I. Composition of pastures, 60–72. Botanical composition, 61; chemical composition, 62–6, compared with other pastures, 69–76; climate and soil, 60–1; correlation between protein and other constitutents, 66–7; sampling procedure, 62, 67; statistical considerations, 66–7, 72. Pt. II. Relation of pasture composition to milk production, 73–80. Average milk production and protein intake, 74–6; intake of other nutrients, 79; quantities of nutrients consumed, 76–9.
Pearsall, W. H., the investigation of wet soils and its agricultural implications, 289–98.
Plant, William, a survey of mineral deficiencies on arable land in two English counties, 41–8.
Plant-growth regulators, field experiments in selective weed-control by. Pt. I, 19–30. Investigations on cereal crops at Jealott's Hill in 1943–5, 21–6; at outside centres, 26–8. Pt. II. Effect on cereal crops, 169–76. Abnormalities due to plant-growth regulators, 172–4; comparison of M.C.P.A. with D.C.P.A., 175–6; effect on germination, 174–5; on yields, 169–72.
Pole Evans, I. B., the possibilities of beef production in southern Africa, 81–94.
Potato clones, testing and maintenance of, 95–104; differences between clones of the same maturity, 100–3; maturity differences and yield, 97–100; use of clones for certified seed, 103–4.
Procter, J., an experiment on the productivity of leys cut for hay, 281–8.

Rendel, J. M., some aspects of longevity in dairy cows, 49–56.
Rice in Malaya, research on, 227–32; agronomic, 228–30; main crops in Malaya, 227; padi test plots and experiment stations, 229; selection and breeding work, 230–2.
Rice, photo-periodism of, in Trinidad, 270–5; experimental work in 1947, 271–3; in 1948, 273–5; growth and yield of Joya rice in 1947–9, 272–3, in 1948 (second crop), 274–5.
Robertson, A., *see* Rendel, J. M.

Sheep, Egyptian, milk production of, 163–8; Ausimi and Rahmani breeds, 163 sqq.; milk yields, 164–6; mixed milk, analysis of, 164, 166–7.
Silo tower, preliminary experiments with a small-scale, 129–36; description and working of tower, 129–31; effluents: collection, transport, and analyses of, 131–5.
Singh, Mukhtar, confounding in split-plot designs with restricted randomization of sub-plot treatments, 190–202.
Sirry, I., milk production of Egyptian sheep, 163–8.
Soil conservation in Kenya Colony. Pt. I. Rainfall, 137–8; soils, 138–9; soil structure, 139 sqq., preservation or improvement of, 145–9; soil-conservation methods, 143–4. Pt. II. Soil-conservation in arable areas, 233–6; in plantation areas: coffee, 239–41, pyrethrum, 241–2, sisal, 238–9, tea, 236–7, wattle, 237–8; organization, &c., in the European areas, 242–4; present position and outlook, 244–7.
Soils, wet, investigation of, 289–98; *Aki-ochi* on degraded soils in Japan, 296–7; field tests, 290–1; nitrogen conversion, 294–5; nitrogen fertilizers, 295–6; swamp soils and rice growing, 295; waterlogging, 292–4.
Split-plot designs, confounding in, 190–202; construction of experiments and structure of their analysis, 191–4; examples of experiments in 1946 and 1947, 194–201.
Stewart, James, *see* Das, P. K.
Sweet corn (maize), studies with, 1–7; effects of sowing time (in England): on ear-characters and yield, 4–5, 6; flowering time and maturity, 1–4; plant height and tiller number, 5–7.

Templeman, W. G., field experiments in selective weed control by plant-growth regulators. I. Weed control in cereal crops, 19–30. II. The effect of plant-growth regulators upon cereal crops, 169–76.
Thomas, Brynmor, the protein quality of grass as determined by the method of Osborne and Mendel, 31–40.
Tick (*Ixodes ricinus* L.), control of, on grassland, 119–28; experimental area and incidence of red-water fever and nymphal ticks, 119–20; field control trials, 120–2; results, 122–7.

Watson, D. J., inflammability of cereal crops in relation to water-content, 150–62.
White, F. H., *see* Hunter, A. W. S.
Wilshaw, R. G. H., agronomic and breeding research on rice, oil-palms, and cacao in Malaya. Pt. I. Rice, 227–32. Pt. II. Oil-palms and cacao, 276–80.